To vaccine or not to vaccine, is that even a question?

Health & Medicine



There is a saying that goes "health is wealth". These days, in the American culture, this phrase has lost its meaning and efficacy with the rise and attitude towards medication. A visit to the doctor in 2018 will take about 10-15 minutes less the waiting time. Essentially, it's become standard to tell the doctor what you're feeling and then they give you a prescription and tell you take it until you're better. If you don't feel better after the pills, you get a new set of pills, rinse and repeat until you feel better; if you feel better. This process has become standardized and so efficient that it's becoming more and more common to do have an e-doctor's visit. In other words, if you feel ill, all you need to do is call a number and tell them what you're feeling and in 10 minutes or less, a prescription will be available for you at your most convenient pharmacy.

Certainly, we can assume that in the medieval times, the lifespan was relatively short granting a person to live until their 40's or 50's due to the prevalence of disease and sickness. These days, we have a chemical solution for almost every ailment that it allows us to live a long life. Among these medical developments, vaccines have been a frequent topic for debate that it might make one wonder why there hasn't been a unanimous consensus regarding such. The goal of this paper is to summarize two textual pieces from the pro-vaxxers and two from the anti-vaxxers, analyze which argument is stronger, and synthesize the essay from a certain stance.

The first of the two pro-vaxxers we will examine is Dr. Sanjay Gupta, the chief medical correspondent of CNN and currently practices as a neurosurgeon. In his essay called "Benefits of Vaccines are a Matter of Fact", his main point is that the efficacy and safety of vaccinations are not, https://assignbuster.com/to-vaccine-or-not-to-vaccine-is-that-even-aquestion/

and should not be, a matter of opinion. He cites a study done in 2014 with 1. 2 million children that show no correlation between autism and vaccines. Dr. Gupta states the scientific process and its results are facts and that one should side with science regarding these things. He acknowledges that there is a disconnect in this that's caused by people's ideologies. Anti-vaxxers put the burden of proof on science. The common conflict here is that a child who is vaccinated is expected to not get sick. However, if the child does have negative effects post-vaccination, then this confirms the argument that vaccines are bad. Dr. Gupta employs the use of logic in his argument for provaccines. He even cites a colleague who reminds us about the reality of anecdotal biases. After looking at the anti-vaxxers argument from a logical perspective. He argues from a societal standpoint that pro/anti-vaccination is an issue that only the wealthy and middle class argue about as he describes how the West Africans were wishing and praying for a vaccine during the Ebola outbreak. Even though vaccinations are a choice, he reflects that this is a choice that not many have the opportunity to make.

The essay concludes by stating that anti-vaxxer's argument revolves around the parent's love for their children. He flips it and uses their argument in the same manner stating that because he loves his children, he had them vaccinated so as to keep them away from preventable diseases.

Dr. Gupta is currently a practicing neurosurgeon. We can extrapolate from this that he must stay current to today's medical news and trends to be able to practice. His essay starts out on a personal but takes on an objective tone once he begins discussing how vaccines have prevented over 6 million

deaths worldwide. The body of his essay tries to inform the reader from an objective standpoint that the argument that anti-vaxxers use are all based on logical fallacies; particularly, burden of proof on the pro-vaxxers, anecdotal bias, and appeal to emotion. He ends his essay returning to a more personal tone when he talks about how the anti-vaxxers appeal to emotion when arguing that they love their children hence will not get them vaccinated. Gupta uses this exact same reasoning as to why he had his children vaccinated. Afterward, he says "To suggest that anyone who vaccinates their kids doesn't love them is a whole new level of lunacy." There is cleverness on his part for this statement. We should note in particular how he backs all of his claims with scientific studies that confirm what he states and that does not resort to any logical fallacies. As far as his essay goes, he doesn't put out any new information. The essay is more informative in the sense that it shows the common arguments of the anti-vaxxer's followed by his opinion regarding such arguments..

The next pro-vaxxer that argues for their side is Peter J. Hotez, a pediatrician for the Baylor College of Medicine and the director for the Texas Children's Hospital Center for Vaccine Development. In his essay for The New York Times, he writes about how the anti-vaxxers movement still persists in today's day and age. In the title alone and initial portion of his writing, he acknowledges the existence of anti-vaxxers but does this in to state as if he questions how it's even possible.

He delves into the nitty gritty quite immediately and explains how exactly the resistance against vaccinations is possible given the knowledge and science available. He attests it to the conscientious exemption loophole. The main argument that he approaches is the one regarding autism and vaccinations. In a way, we can say that he implies to be the main argument of the anti-vaxxers. To address this, he cites three separate studies that show no link between vaccinations and autism, and that vaccinations don't even cause any neurological changes.

Once he finishes stating the lack of correlation, he goes the extra step by describing where autism comes from. In essence, he states it comes from diseases or medication that the mother is given/exposed to. His essay is concluded by describing the harms that the autism and vaccination link presents. From the larger scale, it wastes time and effort for the federal agencies because of people who insist on investigations for this. On the more local scale, parents now have to fear that their children may contract diseases doing normal daily things. Not only does the argument and actions of anti-vaxxers affect healthy children but it also affects children with autism.

Although this writer makes statements regarding nation, his discussion is more Texas-centric and more focused on the autism argument. When he approaches the topic of autism and vaccines, he uses a scientific source and claims that autism is caused by genetic and chemical factors the mother is exposed to; the operative word being the mother.

We can notice how both pro-vaxxers don't present any new information or make any claim that isn't verified by a study. Both of their arguments, upon noticing, revolve around disassembling the anti-vaxxer's arguments by addressing their logical fallacies.

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Now, we move onto the anti-vaxxers. The first writer against vaccinations is Sarah Pope who claims to have a Master's Degree from Pennsylvania. She has a lot of articles and essays posted on the The Healthy Home Economist and is also where her article was found. She begins her essay mentioning doctors by likening them to parrots and begins her stance not by stating that vaccines are bad but by stating that education regarding the matter is what is most important. After which she makes clear that the reasons she states as to why she did not have her children vaccinated are her personal reasons but makes it much more explicit that she comes from a family with a medical background.

Her first reason is that pharmaceutical companies can never be trusted claiming that they are only after profits. She cites one source that is from a fellow blog owner. When she argues this point, she makes a lot claims that the medicine put out by these companies are ineffective but doesn't cite any sources to validate her stance. She then appeals to the reader that the list for proof is long that they should post their own anecdotes regarding such.

The second reason is that all vaccines contain chemicals and heavy metals. She argues a long list of contaminants in vaccines and cites several sources that come from fellow bloggers who advocate anti-vaccination specifically or from The healthy Home Economist as well. The only credible source that she uses in this point is EPA. gov that documents the safe limits for drinking water and contaminants. In this point, she asks very graphically whether as a parent one can imagine injecting this cocktail of poison then questions doctors for allowing and advocating this.

Her third claim is that children who are vaccinated turn out unhealthy and chronically sick. She uses third party surveys and another article from the host site (The Healthy Home Economist) to back this up. The writer was able to utilize a scientific study discussing the link between neuropsychiatric disorders and vaccines — she writes in her article that there is " a strong association between children receiving vaccinations and then immediate development of brain-related autoimmune and inflammatory disorders".

Her fourth point is that other countries are becoming more aware of the dangers of vaccines and discusses about general mortality rates. The fifth argument she makes is that many vaccines have been pulled from the market and talks about incidents in history where makers were either sued or pulled their product from distribution. Her last point is that a vaccine can be administered but not undone.

In the initial portion where she begins her essay she employs ad hominem by attacking the doctors calling them pirates and an appeal to authority when she credits her choice to not vaccinate credible on the basis of her family. In her first point, she uses ad hominem and assumes that Vioxx (the company she mentioned) lies about their drug efficacy and safety. Her claim that Vioxx falsified reports is a wiki page. In point two, she commits the texas sharp-shooter fallacy by nitpicking information from the report to suit her cause regarding contaminants and mentions the EPA standard for water contaminants. I don't think it's fair to state that the level for contaminants in water we consume versus a vaccine we take in is the same. In relation to contaminants, it's basic biological knowledge that our body requires metallic

ions to be in body because it aids enzymes in functioning. She commits the same sharp-shooter fallacy in point four when talking of mortality rates. She cites the mortality rates but doesn't state whether the deaths are due to vaccinations or whether it's just infant mortality in totality.

Almost all of the sources she uses are from the host site or from fellow bloggers whose stance is anti-vaccination. The only credible scientific article she cited was a study between vaccinated and unvaccinated children's health in point three; granted, upon inspection the researchers suggested that there were certain flaws with their study calling for reproduction of experiment to substantiate their claims.

Her weakest argument is point three because this is the only point that she cites scientific studies. Her biggest failure is when she mentions the link between vaccinations and brain problems. She cites a scientific study for this portion. Upon closer inspection, the researchers state that their study proves no causality between the vaccines and brain/psychiatric conditions. What more, the researchers actually encourage families to follow vaccine scheduling as recommended by the CDC.

The last anti-vaxxer we will look at is Suzanne Humphries, MD. Her essay begins with an introduction of herself and the kind of training they received in medical school. Interestingly, she also makes use of the figure of speech likening doctors to parrots and just like the previous writer, she also makes it a point to be explicit in emphasizing that her goal is to educate and not demonize vaccines unlike public health services that push vaccinations.

Her main body begins discussing the history of vaccinations which she follows with a strong statement that the idea that babies need vaccinations to survive is a lie and that babies have the strength of an adult's immune system. She discusses the basic science how immunization works and cites a scientific study that showed children who received the influenza vaccine were more susceptible to non-influenza infections.

She makes a typographical error and repeats a paragraph right before she begins discussing the misconceptions about not vaccinating. Her first point was regarding non-vaccination putting others at risk. She cites a study that states immunised children still contracted the whooping cough and another about baboons who had whooping cough and infection with those vaccinated and unvaccinated. She uses these and points that those who are unvaccinated are not susceptible to infection and that those who are are just as susceptible deeming vaccinations irrelevant.

The second point she brought up was how unvaccinated people spread disease. She defended this point stating how polio and chickenpox vaccines actually gave the recipients ill-effects and the disease itself. The last misconception she states is the notion that diseases that have been eradicated through vaccines will spread if the vaccines are stopped. She shows a graph of mortality rates due to viral infections and states the decline in mortality is due to hygiene and proper nutrition and not vaccines. We should note that she closes this argument stating that "This point is well studied enough to lay aside any concern over whether or not correlation implies causation."

This writer is a doctor and commits ad hominem in the introduction just like the previous writer. Similarly, she states that her goal is to educate the public when the essay develops into a tone that demonizes vaccines.

Contrast this to the pro-vaxxers who made their thesis clear and attacked the argument of the anti-vaxxers.

We can develop assumptions regarding how serious she is on this cause as well as who her target audience is when thinking of the typographical error she made by repeating a paragraph.

Throughout her main body, she makes a lot of outrageous claims but does not provide outrageous evidence to defend her position. In particular, this refers to her claim regarding babies and their immune system. She cites a scientific study regarding the vaccinated children being more susceptible to non-influenza infections. Upon closer inspection, the researchers also claim that their study is flawed and that there isn't a clear defined relation between vaccinated children and infection proneness.

In her claim regarding the children with the whooping cough, she commits the same fallacy of misleading and nitpicking information. Once again, through closer inspection, the scientific study she cited was regarding the symptomatic diagnosis of whooping cough as a condition and not how vaccines were irrelevant.

The third time she commits the same fallacy is regarding the whooping cough and baboons. I looked at the scientific study and it actually attacks her claim regarding vaccinations. The study actually suggested the efficacy of

vaccines and that it needed improvement to attain herd immunity, another point that the writer dismissed. Many of her claims are based on nitpicking information. One example she used was regarding how vaccinated people still get infections from what they were vaccinated against. Again, this is common knowledge that viril have the capability to evolve and that there are multiple strains.

In my opinion, her weakest argument is her last point regarding hygiene and nutrition versus vaccines. She ends the argument as if to say, " a lot of people have talked about this so we already know its true".

Both of these writers have arguments that rely heavily on fallacies. It's surprising that the claims they make are either from unreliable and questionable sources. If not that, they nitpick the information to suit their cause.